

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION
AT RICHMOND, DECEMBER 18, 2020

CLERK'S OFFICE
STATE CORPORATION COMMISSION
2020 DEC 18 A 8:48

201230015

COMMONWEALTH OF VIRGINIA, *ex rel.*

STATE CORPORATION COMMISSION

CASE NO. PUR-2020-00120

Ex Parte: In the matter of establishing rules
and regulations pursuant to § 56-585.5 E 5
of the Code of Virginia related to the
deployment of energy storage

ORDER ADOPTING REGULATIONS

During its 2020 Session, the Virginia General Assembly enacted the Virginia Clean Economy Act ("VCEA").¹ Among other things, the VCEA, in Code § 56-585.5 E, requires Appalachian Power Company ("APCo") and Virginia Electric and Power Company ("Dominion") to petition the State Corporation Commission ("Commission") for approval to construct or acquire 400 megawatts ("MW") and 2,700 MW, respectively, of new utility-owned energy storage resources by 2035. Section 56-585.5 E 5 further provides in part that:

By January 1, 2021, the Commission shall adopt regulations to achieve the deployment of energy storage for the Commonwealth required in subdivisions 1 and 2, including regulations that set interim targets and update existing utility planning and procurement rules. The regulations shall include programs and mechanisms to deploy energy storage, including competitive solicitations, behind-the-meter incentives, non-wires alternatives programs, and peak demand reduction programs.

On June 29, 2020, the Commission established this proceeding for the purpose of complying with this statutory requirement and sought comment on several questions raised by § 56-585.5 E 5 of the Code. The Commission directed APCo and Dominion to submit comments

¹ Senate Bill 851, 2020 Va. Acts ch. 1194, and identical House Bill 1526, 2020 Va. Acts ch. 1193 (effective July 1, 2020).

and permitted any other interested person or entity to submit comments. In addition to answering specific questions, commenters were also permitted to propose specific regulations. In response, comments were filed by Dominion and APCo (collectively, "Joint Commenters") as well as by various other interested persons and entities. Proposed regulations were filed by Joint Commenters; the U.S. Energy Storage Association ("ESA"); and Delorean Power LLC ("Delorean").

On September 11, 2020, the Commission issued an Order for Notice and Comment ("Procedural Order") in this docket. Draft proposed Rules Governing the Deployment of Energy Storage ("Proposed Rules" or "Rules") prepared by the Commission Staff ("Staff") were appended to the Procedural Order. The Procedural Order permitted interested persons to submit comments on or before November 2, 2020, which could include proposals and hearing requests. The Procedural Order further required Staff to file, on or before November 16, 2020, a report ("Staff Report") providing any response to comments, proposals, or requests for hearing submitted to the Commission on the Proposed Rules. Comments concerning the Proposed Rules were filed by: Joint Commenters; Energy Storage Stakeholders ("ES Stakeholders");² Solar Stakeholders;³ Data Center Coalition;⁴ Office of the Attorney General's Division of Consumer Counsel; Environmental Advocates;⁵ Delorean; Mitsubishi Power Americas, Inc. ("Mitsubishi");

² The ES Stakeholders include the ESA, Virginia Advanced Energy Economy, the Maryland, D.C., and Virginia Solar Energy Industries Association ("MDV SEIA") and the Solar Energy Industries Association ("SEIA").

³ The Solar Stakeholders include MDV SEIA and SEIA. The Solar Stakeholders state they "are providing supplemental comments to the Energy Storage Stakeholders, specifically to focus on distributed energy resources, behind-the-meter storage and environmental justice considerations." Solar Stakeholders Comments at 1.

⁴ The Data Center Coalition represents that it is the national trade association for the data center industry.

⁵ Environmental Advocates include the Southern Environmental Law Center, Appalachian Voices, and the Piedmont Environmental Council.

Sierra Club; Virginia Department of Mines, Minerals And Energy ("DMME"); and GlidePath Development LLC ("GlidePath"). Comments were also received jointly from the following members of the Virginia General Assembly: Senator Jennifer McClellan, Senator Scott Surovell, Delegate Rip Sullivan, Delegate Jay Jones, Delegate Mark Keam, and Delegate Alfonso Lopez ("Virginia Legislators"). No requests for hearing were received.

On November 16, 2020, Staff filed a Staff Report including certain revisions to the Proposed Rules proposed by Staff after reviewing the comments provided.

NOW THE COMMISSION, upon consideration of the foregoing, finds that we should adopt the Rules appended hereto as Attachment A effective January 1, 2021. As an initial matter, the Commission expresses appreciation to those who have submitted written comments for our consideration. We have carefully reviewed and considered all comments filed in this matter. The VCEA envisions significant increased deployment of energy storage resources in Virginia through 2035. The Rules adopted today are intended to support this increased deployment, while also protecting the electric system and Virginia consumers. As experience is gained and lessons are learned, the Commission intends to update and revise these Rules as needed. In this regard, we further note that the Rules, as modified herein, permit requests for waiver.⁶

The Rules we adopt herein contain a number of modifications to those that were first proposed by Staff and published in the *Virginia Register of Regulations* on October 12, 2020. These modifications follow our consideration of further proposed changes made by the Staff in its Staff Report and the comments filed in this proceeding. Although we will not comment on each Rule in detail, there are several issues that we will address further herein.

⁶ 20 VAC 5-335-130.

Task Force, Annual Renewable Portfolio Standard ("RPS") Plans, and Order 2222

Before discussing specific Rules adopted today, the Commission recognizes that this rulemaking is not happening in a vacuum and our decision herein is impacted and informed by other legislation and developments on the national level, which will be discussed further herein.

First, we note that legislation (House Bill 1183)⁷ passed by the 2020 Virginia General Assembly directs the Commission to:

create a task force ["Task Force"]⁸ to evaluate and analyze the regulatory, market, and local barriers to the deployment of distribution and transmission-connected bulk energy storage resources to help integrate renewable energy into the electrical grid, reduce costs for the electricity system, allow customers to deploy storage technologies to reduce their energy costs, and allow customers to participate in electricity markets for energy, capacity, and ancillary services. . . . The [Commission] shall submit a copy of the task force's evaluation and analysis to the General Assembly no later than October 1, 2021.

As discussed further below, we find that many of the issues raised by commenters in this proceeding should be further addressed and evaluated by the Task Force,⁹ given the limited timeframe for finalization of the Rules.¹⁰ The Task Force's report, which must be submitted to

⁷ 2020 Va. Acts of Assembly ch. 863.

⁸ The legislation provides that the Task Force shall include "representatives of municipalities, the Virginia Solar Energy Development and Energy Storage Authority, the Department of Mines, Minerals and Energy, the Office of the Attorney General, and at least one representative each from the following sectors: regulated electric service providers, competitive electric service providers, rural utility consumer services cooperatives, commercial or industrial energy customers or an association representing such customers, and energy storage companies or an association representing such companies."

⁹ The Task Force is directed by the VCEA to: "(i) assess the potential costs and benefits, including impacts to the transmission and distribution systems, of such energy storage resources and (ii) assess how electric utilities, competitive service providers, customers, and other third parties are able to deploy energy storage resources in the bulk market, in the utility system, and in behind-the-meter applications."

¹⁰ As quoted above, the VCEA requires the Commission to adopt the Rules by January 1, 2021.

the General Assembly by October 1, 2021, may include any recommended changes or additions to the Rules that we adopt today, as well as any supporting analysis.

Second, we also note that Dominion and APCo are required to file annual RPS Plans that address each utility's progress and plans towards reaching the energy storage targets.

Specifically, the VCEA requires the utilities to:

submit annually a plan and petition for approval for the development of new solar and onshore wind generation capacity. . . . Such plan shall also include the utility's plan to meet the energy storage project targets of subsection E, including the goal of installing at least 10 percent of such energy storage projects behind the meter.¹¹

As discussed further below, utility specific issues related to energy storage deployment may be raised in the utilities' annual RPS Plan proceedings.¹² The statute requires that the utilities must include information on the progress toward meeting energy storage deployment interim targets to obtain the necessary approvals to construct or acquire, new utility-owned energy storage resources outlined in the VCEA.

Third, the Federal Energy Regulatory Commission ("FERC") issued an Order ("Order 2222") earlier this year.¹³ As described by Joint Commenters:

[i]n Order No. 2222, FERC adopted reforms to remove barriers to the participation of distributed energy resource aggregations in the Regional Transmission Organization (RTO) and Independent System Operator (ISO) markets (RTO/ISO markets). FERC's definition of distributed energy resources includes electric storage resources.

¹¹ Code § 56-585.5 D 4.

¹² Dominion filed its 2020 RPS Filing on October 30, 2020, in Case No. PUR-2020-00134. APCo filed its 2020 RPS Filing on November 2, 2020, in Case No. PUR-2020-00135.

¹³ *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 172 FERC ¶ 61,247 (2020).

Order No. 2222 also requires . . . coordination between aggregators, ISO/RTOs, distribution utilities, and state and local regulatory authorities. In so doing, FERC sought to avoid creating undue barriers to entry for distributed energy resource aggregations while also considering the substantial role of distribution utilities and state and local regulators in ensuring the safety and reliability of the distribution system.¹⁴

In adopting the Rules, we are cognizant that Order 2222 may impact the deployment of energy storage and participation of Virginia-sited energy storage in the wholesale markets, including through aggregation of smaller resources and behind-the-meter incentives.

20 VAC 5-335-20

Turning to specific Rules, we adopt the definitions section as proposed in the Staff Report. We find those clarifications and refinements reasonable for purposes of the Rules. Among other things, we adopt a definition for "energy storage" that is technology neutral, so long as the technology is capable of absorbing energy, storing that energy for a period of time, and re-delivering that energy after storage.¹⁵

20 VAC 5-335-30

The comments filed in this case reflect disagreement concerning the specific interim targets for energy storage deployment that should be adopted by the Commission. For example, the Joint Commenters argue "by back-end loading interim targets, customers will likely benefit from any advancements in rapidly-evolving energy storage technology and from projected decreases in costs."¹⁶ The ES Stakeholders disagree, arguing that "by delaying the deployment

¹⁴ Joint Commenters Comments at 6 (internal quotation marks and footnotes omitted).

¹⁵ We agree with certain commenters that the Rules should be technology neutral, and the Commission declines to incorporate references in the Rules to specific types of storage technology such as hydrogen-based technology, as also requested by some commenters. *See* Mitsubishi Comments at 6.

¹⁶ Joint Commenters Comments at 1.

of energy storage, the Commission will delay anticipated cost declines and miss important benefits of early deployment of energy storage."¹⁷ Among other things, ES Stakeholders reason that "[a] limited storage deployment in early years will prevent Virginia from gaining experience with a diversity of customer benefits, interconnection types, technologies, ownership models, and customer benefits to determine the best long-term path forward as the Commonwealth concurrently pursues 100 percent clean electricity."¹⁸

We adopt the interim targets as originally proposed. In so doing, we are mindful of the current nascent stage of energy storage deployment in Virginia. Earlier this year, for example, we approved Dominion's first energy storage pilot program, which includes 16 MW of new Company-owned energy storage projects.¹⁹ As approved herein, the interim targets require Dominion and APCo to seek approval of 250 MW and 25 MW, respectively, of new energy storage by December 31, 2025. We find this level, as well as the other interim targets, to be reasonable at this time. These interim targets are designed to provide steady continuous development in energy storage complementary to the VCEA. We urge the utilities to make steady progress toward the 2035 mandate, and these interim targets reflect this goal. The Task Force may, in its discretion, address and report on the costs and benefits of more aggressive interim targets. Dominion and APCo are also required to report on their progress towards meeting these particular targets in their annual RPS Plan filings. Should circumstances warrant, the Commission may adjust the interim targets in a future proceeding to amend the Rules.

¹⁷ ES Stakeholders Comments at 4.

¹⁸ *Id.* at 5-6.

¹⁹ *Application of Virginia Electric and Power Company, To participate in the pilot program for electric power storage batteries pursuant to § 56-585.1:6 of the Code of Virginia, and for certification of a proposed battery energy storage system pursuant to § 56-580 D of the Code of Virginia*, PUR-2019-00124, Doc. Con. Cen. No. 200220170, Final Order (Feb. 14, 2020) ("Storage Pilot Order").

Moreover, nothing prevents Dominion and APCo from seeking Commission approval of amounts of energy storage above the interim targets.

Several commenters request that the Commission establish certain additional requirements associated with the interim targets. For example, GlidePath recommends that 100 percent of non-utility projects be procured via long-term power purchase agreement ("PPA") style mechanisms.²⁰ Environmental Advocates propose to add the legislatively set goal of 10 percent behind-the-meter energy storage to the regulations.²¹ Delorean suggests that the interim targets have individual requirements for distribution-connected, behind-the-meter, and standalone energy storage.²² ES Stakeholders suggest that energy storage located in the service territory of a municipal utility that purchases electricity primarily from Dominion or APCo should count towards the interim targets for that utility.²³

The Commission finds that these additional requirements need not be included in the Rules at this time. As noted by Staff, the VCEA establishes a goal of installing 10 percent of energy storage behind-the-meter, and there is no need to repeat that provision in the Rules.²⁴ The Task Force may make recommendations related to the need for specific requirements for distribution-connected and stand-alone storage and whether energy storage of a municipal utility should count towards a utility's interim targets.

²⁰ GlidePath Comments at 3.

²¹ Environmental Advocates Comments at 18.

²² Delorean Comments at 3-4.

²³ ES Stakeholders Comments at 20.

²⁴ Staff Report at 8-9.

Finally in regard to 20 VAC 5-335-30, the VCEA requires that "[a]fter July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall be (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party other than a public utility, with the capacity from such facilities sold to the public utility."²⁵ As initially proposed, Section 30 included language that would prevent a utility-affiliated company from qualifying as "persons other than a public utility" and counting towards the 35 percent threshold. We agree with Joint Commenters and Staff that this language can be removed.²⁶ We note that any contract or arrangement between a utility and an affiliated interest is subject to approval by this Commission under the Affiliates Act,²⁷ as acknowledged by the Joint Commenters.²⁸

20 VAC 5-335-40

Pursuant to 20 VAC 5-335-40, utilities will be required to competitively procure energy storage resources, including at least one competitive solicitation per calendar year, subject to the provisions of the Rule. Some commenters recommend that utilities be required to provide bidders with access to relevant electric system data with appropriate confidentiality safeguards in place for privacy, system security, and public safety.²⁹ Staff agrees with this recommendation

²⁵ Code § 56-585.5 E 5.

²⁶ Staff Report at 7-8; Joint Commenters Comments at 2-5.

²⁷ Code § 56-76 *et seq.*

²⁸ Joint Commenters Comments at 4-5. The Environmental Advocates recommend independent management of competitive procurements involving utility affiliates. Environmental Advocates Comments at 16. We find such requirement premature at this time, but we note that this issue may be evaluated further by the Task Force.

²⁹ Data Center Coalition Comments at 6; ES Stakeholders Comments at 8.

and included proposed new language in Section 40 to address this issue.³⁰ We agree with this change and have included it in the Rules.

Delorean and ES Stakeholders recommend that the notice period for requests for proposals ("RFPs") be extended from at least 45 days to at least 90 days.³¹ In the Staff Report, Staff recommends extending the notice period to at least 60 days.³² Given that distributed energy storage use on the electric system represents a largely new technology, we find it reasonable to adopt a 60-day minimum notice period for RFPs. This additional time will benefit energy storage developers by providing additional time to prepare their responses to utility RFPs.

Several parties recommend the Commission explore use of a third-party administrator to evaluate bids to ensure all energy storage projects are competitively procured in a fair, impartial, and transparent manner.³³ Staff agrees with the idea in concept but states that several questions remain unanswered about how this process would be run in practice, including cost responsibilities.³⁴ We will not require use of a third-party administrator at this time; however, this may be an appropriate topic for further consideration by the Task Force. Similarly, we decline to expand the Rules to:

- Require cost-benefit analyses and identify compliance and Commission oversight procedures;³⁵

³⁰ Staff Report at 9.

³¹ Delorean Comments at 6; ES Stakeholders Comments at 20.

³² Staff Report at 9.

³³ See, e.g., Virginia Legislators Comments at 2; ES Stakeholders Comments at 8; Delorean Comments at 6.

³⁴ Staff Report at 10.

³⁵ See, e.g., Data Center Coalition Comments at 4-5; Solar Stakeholders Comments at 4; Delorean Comments at 7.

- Require utilities to report on the results of completed RFPs;³⁶
- Identify procedures for evaluating the outcome of completed RFPs to determine whether the anticipated benefits to specific storage system performance were achieved and whether there are any lessons learned that might inform future RFPs;³⁷ and
- Provide an opportunity for interested parties to comment on or petition to hold proceedings to further shape future RFPs.³⁸

We find inclusion of these proposed requirements in the Rules to be premature at this time.

These topics, however, may be appropriate for further consideration by the Task Force or as part of evaluating Dominion's and APCo's annual RPS Plan filings.

20 VAC 5-335-50, 20 VAC 5-335-60, and 20 VAC 5-335-70

Rules 50, 60, and 70 address behind-the-meter incentives, non-wires alternatives programs and peak demand reduction programs, respectively. Generally, these Rules require the utility to address these incentives and programs in each utility's annual RPS Plan proceeding discussed above. If a proposed incentive or program is offered as a part of a demand-side management program, the Rules also permit a utility to seek approval through existing processes for demand-side programs under Code § 56-585.1 A 5.

Certain commenters request that language be added to require utilities to describe how a proposed program would enable the utility to meet the energy storage targets, including the 10 percent behind-the-meter goal.³⁹ Other recommendations include making program approval under these sections contingent on whether the program supports meeting the statutory goal of

³⁶ Data Center Coalition Comments at 5-6.

³⁷ *Id.* at 5.

³⁸ *Id.*

³⁹ *See, e.g.,* ES Stakeholders Comments at 10.

installing at least 10 percent of energy storage behind-the-meter.⁴⁰ Staff does not support these recommendations, expressing concern they would unduly limit deployment of energy storage at its current nascent stage.⁴¹ We share this concern and will not include these requirements in the Rules. Notwithstanding our decision in this regard, issues related to meeting the behind-the-meter goals may be raised as part of the Task Force or in cases for approval of specific programs, which could be part of the annual RPS Plan proceeding, part of a demand-side management filing, or a stand-alone filing. We also note that, given the lack of experience in Virginia with behind-the-meter storage programs, it is currently unknown how receptive customers will be to such programs.

ES Stakeholders recommend including deadlines for proposing an initial set of programs to ensure near-term implementation of behind-the-meter incentives, non-wires alternative programs and peak demand reductions programs.⁴² We do not find this requirement necessary at this time. Should the Commission find at a later point that Dominion and APCo have unreasonably delayed filing programs for Commission approval, we can address such in each utility's annual RPS Plan proceeding or other appropriate proceeding.

ES Stakeholders also recommend the Commission direct utilities to specifically propose "Bring Your Own Device Programs" to incentivize behind-the-meter storage systems.⁴³ Staff recommends this topic be explored by the Task Force.⁴⁴ We agree with Staff that inclusion of

⁴⁰ *Id.*

⁴¹ Staff Report at 11-12.

⁴² ES Stakeholders Comments at 10-11.

⁴³ *Id.* at 11.

⁴⁴ Staff Report at 10.

this specific program in the Rules is not necessary at this time and that the Task Force may want to address this program further.⁴⁵

Environmental Advocates recommend the Commission limit a utility's ability to seek approval of energy storage through existing demand-side management programs by requiring the utility to demonstrate energy storage is cost competitive with other solutions available to the utility.⁴⁶ We find this recommendation unnecessary at this time and agree with Staff that such a requirement could unduly limit energy storage deployment development.⁴⁷ We decline to limit energy storage in this manner through a rulemaking. This determination, however, in no way limits the evidence the Commission might consider relevant in approving a specific program.

20 VAC 5-335-80 – Applicability and Burden of Permitting Requirements

Many commenters address the permitting of non-utility energy storage facilities set forth in 20 VAC 5-335-80. Several commenters take issue with the permitting requirements of the Rules applying only to non-utility owned storage.⁴⁸ As explained by the Staff Report, utility construction of electrical facilities is already encompassed in other statutes that need not be incorporated into the Rules.⁴⁹ For example, under Code § 56-265.2, a public utility must obtain a certificate of public convenience and necessity "to construct, enlarge or acquire, by lease or

⁴⁵ Similarly, we decline to limit further the parameters of proposed non-wires alternatives programs and peak reduction programs as part of this rulemaking. *See, e.g.*, Delorean Comments at 10 (recommending limitations on peak demand reduction programs); Environmental Advocates Comments at 20 (recommending limits on non-wires alternative plans). If deemed appropriate, the Task Force may consider and recommend changes related to these recommendations.

⁴⁶ Environmental Advocates Comments at 18.

⁴⁷ *See* Staff Report at 12.

⁴⁸ Delorean Comments at 11; ES Stakeholders Comments at 13; GlidePath Comments at 3.

⁴⁹ Staff Report at 13.

otherwise, any facilities for use in public utility service, except ordinary extensions or improvements in the usual course of business." Similarly, under Code § 56-580 D,

[t]he Commission shall permit the construction and operation of electrical generating facilities in Virginia upon a finding that such generating facility and associated facilities (i) will have no material adverse effect upon reliability of electric service provided by any regulated public utility, (ii) are required by the public convenience and necessity, if a petition for such permit is filed after July 1, 2007, and if they are to be constructed and operated by any regulated utility whose rates are regulated pursuant to § 56-585.1, and (iii) are not otherwise contrary to the public interest.⁵⁰

Several commenters also take issue with the potential burden of the permitting process set forth in 20 VAC 5-335-80.⁵¹ The Commission has no desire to impose unnecessary regulatory burdens; however, the Commission has the duty to protect the reliability and safety of the electric system to which these non-utility energy storage assets will interconnect. The Rules are intended to ensure developers seeking to operate within the Commonwealth will operate safely, will not negatively impact the reliability of the electric power system, and will be ethically responsible in their interactions with Virginia consumers. The Rules are not intended to curtail private development of energy storage. Like generating units, energy storage facilities will inject power onto the electric grid and it is logical that the permitting process be similar to that of generating units.⁵² As set forth in the Staff Report, the permitting process set forth in the Rules is structured similar to (i) the Commission's rules applicable to non-storage generating

⁵⁰ As part of approving Dominion's energy storage pilot program, the Commission approved an amended certificate of public convenience and necessity for the Company's Scott solar generating facility pursuant to Code § 56-580 D. Storage Pilot Order at 5.

⁵¹ See, e.g., ES Stakeholders Comments at 11-12; Delorean Comments at 2; Virginia Legislators Comments at 2; DMME Comments at 1-2.

⁵² In addition, when charging, energy storage resources are a source of new load.

facilities certificated by the Commission⁵³ and (ii) guidelines applicable to solar and wind facilities participating in the Commission's pilot program for third party PPAs.⁵⁴ Energy storage deployment is only beginning to develop in Virginia, but once additional experience is gained in the deployment of energy storage, the Commission may find streamlining the permitting requirements to be reasonable.⁵⁵

Finally, there is significant disagreement about the appropriate size threshold for triggering the permitting requirements of 20 VAC 5-335-80. As originally proposed, the threshold would be triggered by an energy storage power rating of 100 kilowatts or larger. Environmental Advocates and ES Stakeholders recommend the Commission increase the threshold size to 20 MW, and Delorean recommends the Commission increase the threshold size to 25 MW.⁵⁶ Recognizing that the Commission's Generation Rules have a threshold of 5 MW to trigger permitting requirements, the Staff Report recommends the Commission increase the size threshold to 1 MW given the early stage of energy storage deployment in Virginia.⁵⁷ We agree with Staff's proposal to increase the threshold to 1 MW. In reaching this determination, we find persuasive that broad deployment of distributed energy storage across Virginia's electric system

⁵³ Rules Governing the Filing Requirements in Support of Applications for Authority to Construct and Operate an Electric Generating Facility, 20 VAC 5-302-10 *et seq.* ("Generation Rules").

⁵⁴ *Commonwealth of Virginia, ex rel. State Corporation Commission, Concerning the establishment of a renewable energy pilot program for third party power purchase agreements*, Case No. PUE-2013-00045, 2013 S.C.C. Ann. Rept. 405, Order Establishing Guidelines (Nov. 14, 2013).

⁵⁵ Several commenters raised the possibility of applying in various ways the Permit-by-Rule ("PBR") process used by the Department of Environmental Quality ("DEQ") to permit certain small renewable facilities. *See, e.g.*, ES Stakeholders Comments at 12; GlidePath Comments at 4. As noted in the Staff Report, the DEQ's permitting authority does not apply to energy storage. Staff Report at 19. *See* Code § 10.1-1197.5 *et seq.*

⁵⁶ *See, e.g.*, Environmental Advocates Comments at 23; ES Stakeholders Comments at 12; Delorean Comments at 12.

⁵⁷ Staff Report at 15-16.

represents a new use of this technology and warrants a cautious approach. We find a 1 MW threshold appropriately balances the burden of compliance with the need to determine and monitor the full impacts of these resources on the electric system. Once additional experience is gained, the Commission may consider adjusting the threshold further.

20 VAC 5-335-80 Notice Requirements

Commenters take issue with the proposed public notice requirements in 20 VAC 5-335-80.⁵⁸ The Staff Report argues that public notice is needed to address environmental justice policies, among other things.⁵⁹ We agree that public notice should be required by the Rules for facilities exceeding the size to trigger permitting requirements. The Commission requires public notice in numerous proceedings brought before it, particularly those involving new generation facilities.⁶⁰ Notably, the Commission also required public notice of Dominion's energy storage pilot program.⁶¹ The Commission recognizes that public notice may involve additional costs for applicants and would consider recommendations from the Task Force on ways to minimize these costs while still ensuring adequate public notice.

⁵⁸ See, e.g., Delorean Comments at 14; ES Stakeholders Comments at 13-14.

⁵⁹ Staff Report at 18. The 2020 General Assembly passed legislation that formally adopted the following as the policy of the Commonwealth: "to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice communities and fenceline communities." Code § 2.2-235.

⁶⁰ See, e.g., *Petition of Virginia Electric and Power Company, For approval and certification of the proposed US-4 Solar Project pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia, and for approval of a rate adjustment clause, designated Rider US-4, under § 56-585.1 A 6 of the Code of Virginia*, Case No. PUR-2019-00105, Doc. Con. Cen. No. 190750095, Order for Notice and Hearing at 10-16 (July 31, 2019); *Application of C4GT, L.L.C., For certification of an electric generating facility in Charles City County pursuant to § 56-580 D of the Code of Virginia*, Case No. PUE-2016-00104, Doc. Con. Cen. No. 161020267, Order for Notice and Hearing at 6-9 (Oct. 18, 2016).

⁶¹ *Application of Virginia Electric and Power Company to participate in the pilot program for electric power storage batteries pursuant to § 56-585.1:6 of the Code of Virginia, and for certification of a proposed battery energy storage system pursuant to § 56-580 D of the Code of Virginia*, PUR-2019-00124, Doc. Con. Cen. No. 190830034, Order for Notice and Hearing at 7-10 (Aug. 16, 2019). The Commission further notes that pursuant to Code § 10.1-1197.6, applicants for a DEQ PBR must also comply with certain notice requirements.

20 VAC 5-335-80 Requisite Commission Findings

Pursuant to subsection B of 20 VAC 5-335-80, in order to approve an energy storage facility, the Commission must find it (i) will have no material adverse effect upon the reliability of electric service provided by any regulated public utility; (ii) does not adversely impact any goal established by the Virginia Environmental Justice Act; and (iii) is not otherwise contrary to the public interest. One or more commenters request the Commission consider excluding each of these required findings. As discussed further below, we find these minimum determinations necessary at this time to protect the electric system as well as utility customers.

With respect to the finding of "no material adverse effect on the reliability of electric service," we note that this requirement is also found in Code § 56-580 D, quoted above, which is applicable to generation facilities. We see no valid reason to treat energy storage facilities differently in this regard. As previously mentioned, like generation facilities, energy storage facilities will inject energy onto the electric grid. In addition, they will also be a source of new incremental load. While we appreciate that other entities such as PJM Interconnection, L.L.C. ("PJM"),⁶² and the North American Electric Reliability Corporation ("NERC") may also have responsibilities to safeguard the reliability of the electric grid, those entities are concerned primarily with the bulk electric (*i.e.*, transmission) system. The States have near complete responsibility over the safety, reliability and adequacy of the distribution grid that delivers power to end use customers; we will not abdicate our responsibility in this regard. We note that certified compliance with the reliability requirements of PJM, NERC, or other relevant authority,

⁶² PJM is the regional transmission organization that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

could be of evidentiary value to a finding of compliance with the Rule's "no material adverse effect" requirement.

Next, regarding environmental justice, we do not find compliance with this requirement to be unduly burdensome for developers at this time. The General Assembly has made it the Commonwealth's policy to pursue environmental justice, and the Commission finds it reasonable to recognize this requirement in our Rules.

Finally, certain commenters request that the Commission remove the required finding that a facility is "not otherwise contrary to the public interest."⁶³ In addition to being included in Code § 56-580 D, this requirement is also part of the Commission's Generation Rules.⁶⁴ We see no reason to treat energy storage facilities differently at this time.

20 VAC 5-335-80 Filing Requirements

Commenters also take issue with certain filing requirements included in 20 VAC 5-335-80. Delorean proposes to add language permitting applicants to indicate instances where any environmental information required is not applicable to a particular project or technology.⁶⁵ We agree with this recommended change and have included it in the Rules.

ES Stakeholders recommend that the Commission remove the requirement for an applicant to provide financial information, reasoning that it is duplicative of requirements of the PJM interconnection process and localities.⁶⁶ The Commission agrees with Staff that proof of financial viability is an important consumer protection and finds the Rules should include this

⁶³ See, e.g., Delorean Comments at 12; GlidePath Comments at 4.

⁶⁴ See 20 VAC 5-302-10.

⁶⁵ Delorean Comments at 13.

⁶⁶ ES Stakeholders Comments at 13.

requirement.⁶⁷ The VCEA provides that "at least 35 percent of the energy storage facilities placed into service shall be (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party other than a public utility, with the capacity from such facilities sold to the public utility."⁶⁸ Particularly given this large carve-out, it is important that non-utility energy storage be provided in a reliable manner by reputable, financially secure entities. If an energy storage provider were to default on a PPA with a utility, for example, the utility may have to obtain a replacement resource that could be at a higher cost to customers. Environmental concerns could also be raised if an energy storage provider were to go bankrupt and abandon a resource without providing for its continued maintenance and upkeep. Finally, we note that comparable information is also required of other entities licensed by the Commission, including competitive service providers, competitive local exchange carriers, and electric and natural gas aggregators.⁶⁹

20 VAC 5-335-90, 20 VAC 5-335-100, and 20 VAC 5-335-110

Pursuant to 20 VAC 5-335-90, aggregators of energy storage facilities are required to obtain a license from the Commission. Several commenters urge the Commission not to require such licensure, or to only require limited licensure for aggregators offering certain services.⁷⁰ We will include the required licensure of energy storage aggregators in the Rules. In doing so, we recognize that similar licensure is required of aggregators of competitive electric and natural gas services under the Commission's Rules Governing Retail Access to Competitive Energy

⁶⁷ See Staff Report at 18.

⁶⁸ Code § 56-585.1 E 5.

⁶⁹ See *e.g.*, 20 VAC 5-312-40; 20 VAC 5-417-20.

⁷⁰ Sierra Club Comments at 4; ES Stakeholders Comments at 14-15; Solar Stakeholders Comments at 5; Environmental Advocates Comments at 24.

Services.⁷¹ We also recognize there may likely be an increased number of entities seeking to provide aggregation services related to energy storage as a result of Order 2222, as discussed above. We note that the Commission currently has 82 active aggregator licenses in Virginia involving aggregation of electric and natural gas services. The Commission is not aware of any complaints by licensees that the Commission's oversight has suppressed the market for these aggregators.

Also with respect to this Rule, Joint Commenters request clarification regarding the requirement of subsection B 18 of 20 VAC 5-335-90, which requires an applicant to include information related to the standards of conduct.⁷² We do not find additional clarification necessary at this time and note that similar requirements have been adopted recently for other applicants in similar situations.⁷³

Other matters

Delorean provides additional proposed rules to be applicable to APCo's and Dominion's annual RPS Plan filings. While we appreciate the intent behind Delorean's proposal, we decline to adopt those rules as part of the Rules Governing the Deployment of Energy Storage. In the future, we may consider adopting rules applicable to the Annual RPS Plan filings once the Commission has gained some experience with those proceedings, which have just recently begun. Such consideration would be through a separate docketed proceeding with appropriate notice and opportunity for comment.

⁷¹ 20 VAC 5-312-10 *et seq.*

⁷² Joint Commenters Comments at 7.

⁷³ *See, e.g.*, 20 VAC 5-315-77 (effective March 1, 2020).

Accordingly, IT IS ORDERED THAT:

(1) The Regulations Governing the Deployment of Energy Storage, 20 VAC 5-335-10 *et seq.*, as shown in Attachment A to this Order, are hereby adopted and are effective as of January 1, 2021.

(2) The Commission's Division of Information Resources shall forward a copy of this Order, with Attachment A, to the Registrar of Regulations for appropriate publication in the Virginia Register of Regulations.

(3) An electronic copy of this Order with Attachment A shall be made available on the Division of Public Utility Regulation's section of the Commission's website:

scc.virginia.gov/pages/Rulemaking

(4) This docket is dismissed.

A COPY hereof shall be sent electronically by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the Commission.

ATTACHMENT A**State Corporation Commission****Chapter 335 Regulations Governing the Deployment of Energy Storage**Chapter 335CHAPTER 335 REGULATIONS GOVERNING THE DEPLOYMENT OF ENERGY STORAGE**20VAC5-335-10. Purpose and applicability.**

This chapter is promulgated pursuant to § 56-585.5 E 5 of the Code of Virginia to achieve the deployment of energy storage for the Commonwealth. Each Phase I or Phase II Utility is subject to 20VAC5-335-30 through 20VAC5-335-70, 20VAC5-335-120, and 20VAC5-335-130. Non-utility developers, owners, operators, and aggregators of energy storage are subject to 20VAC5-335-80 through 20VAC5-335-130. Electric cooperatives are not subject to this chapter.

20VAC5-335-20. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Behind the meter" means any system that is on the customer side of the utility service meter.

"Behind-the-meter incentive" means any incentive that encourages an end-use electric customer to implement energy storage systems that are connected to the customer side of the utility service meter, regardless of who actually owns the energy storage equipment.

"Commission" means the Virginia State Corporation Commission.

"Demand-side management program" means energy efficiency, demand response, or peak shaving programs [or pilots] approved by the commission that a utility may offer to customers pursuant to § 56-585.1 A 5 of the Code of Virginia.

"Energy storage" means any technology that is capable of absorbing energy, storing that energy for a period of time, and re-delivering that energy after storage.

"Energy storage aggregator" means a person or entity that, as an agent or intermediary, (i) offers to purchase or purchases energy storage system capabilities; or (ii) offers to arrange for or arranges for the purchase of energy storage system capabilities for the purposes of combining or aggregating those capabilities to enable the participation of multiple energy storage systems in electricity markets where such individual systems could not participate individually.

"Energy storage capacity" [or "stored usable energy"] means the maximum amount of stored energy of the energy storage system in kilowatt-hours or megawatt-hours that can be delivered to the grid.

"Energy storage facility" or "energy storage system" means an energy storage resource and any equipment, other than a transmission or distribution line, needed to interconnect the energy storage resource to the utility's electric system. This additional equipment can include switchgear, transformers, inverters, switches, cables, wires, conductors, bus work, protection devices and systems, communication and control devices and systems, fire protection systems, and environmental protection systems. [Other costs associated with the construction and operation of an energy storage facility or energy storage system may include property acquisition costs, development and study costs, or other costs necessary to complete an operative facility or system.]

"Energy storage power rating" means the total possible instantaneous discharge capability in kilowatts or megawatts of the energy storage system, or the maximum sustained rate of discharge that the energy storage system can achieve starting from a fully charged state to a fully discharged state.

"Energy storage project" means an energy storage facility with a specified location and an associated [nameplate energy storage] capacity [and energy storage power rating] .

"Energy storage resource" means (i) a resource capable of collecting energy from the electric power grid or a power generation facility and then discharging the energy at a future point in time to provide electricity or other grid services, or (ii) a resource capable of the active or dynamic exchange of energy.

"Non-wires alternative [program] " means any electricity grid investment, project, or program that uses nontraditional transmission or distribution solutions, such as distributed generation, energy storage, energy efficiency, demand response, and grid software and controls, to delay or remove the need for traditional system upgrades of equipment, such as transmission or distribution lines or transformers, without impacting the safety or overall performance of the electric power system.

"Peak demand reduction program" means any project or program aimed at shifting time of use of electricity from one period to another for the overall economic and reliability benefit of the electric power grid.

"Person" means any individual, corporation, partnership, association, company, business, trust, joint venture, or other private legal entity, and the Commonwealth or any municipality.

"Phase I Utility" has the same meaning as provided in subdivision A 1 of § 56-585.1 of the Code of Virginia.

"Phase II Utility" has the same meaning as provided in subdivision A 1 of § 56-585.1 of the Code of Virginia.

"Storage duration" means the amount of time an energy storage system can discharge at its energy storage power rating before depleting the stored usable energy when the system is at

maximum energy [storage] capacity. [Energy storage resources can de-rate their maximum output in order to increase energy storage duration.]

20VAC5-335-30. Minimum interim targets for energy storage deployment by Phase I and Phase II Utilities.

A. A Phase I Utility shall petition the commission for any necessary approvals to construct or acquire the level of energy storage [capacity power rating] by the following dates:

1. By December 31, 2025, 25 megawatts;
2. By December 31, 2030, an additional 125 megawatts for a total of 150 megawatts; and
3. By December 31, 2035, an additional 250 megawatts for a total of 400 megawatts.

B. A Phase II Utility shall petition the commission for any necessary approvals to construct or acquire the level of energy storage [capacity power rating] by the following dates:

1. By December 31, 2025, 250 megawatts;
2. By December 31, 2030, an additional 950 megawatts for a total of 1,200 megawatts;
and
3. By December 31, 2035, an additional 1,500 megawatts for a total of 2,700 megawatts.

C. At least 35% of energy storage facilities placed into service by a Phase I or Phase II Utility shall be (i) purchased by the Phase I or Phase II Utility from a party other than the utility, or (ii) owned by a party other than the Phase I or Phase II Utility with the capacity from such facilities sold to the utility. The 35% threshold shall also apply to each interim [~~targets-period target~~] identified in this section [~~and a Phase I or Phase II Utility's acquisition of energy storage facilities, and purchases of capacity from its own utility-affiliated interests shall not count toward this 35% threshold~~].

D. Any type of energy storage technology shall count toward the interim targets set forth in subsections A and B of this section.

E. Each Phase I or Phase II Utility shall report on its plan to meet these interim targets and its progress toward meeting these interim targets in the proceedings established by § 56-585.5 D 4 and §§ 56-597 through 56-599 of the Code of Virginia, consistent with the requirements of each respective statute.

20VAC5-335-40. Procurement of energy storage projects by Phase I and Phase II Utilities.

A. In procuring energy storage projects, each Phase I or Phase II Utility shall use competitive bidding to the extent practicable, consistent with § 56-233.1 of the Code of Virginia.

B. Beginning in 2021 and ending in [either] 2035 or when the storage targets [set forth in 20 VAC 5-335-30] are met, whichever is sooner, each Phase I or Phase II Utility shall sponsor at least one competitive solicitation for energy storage projects per calendar year, consistent with the following requirements:

1. The request for proposals shall quantify and describe the utility's need for energy or capacity.
2. The request for proposals shall be publicly announced and made available for public review on the utility's website at least [45 60] calendar days prior to the closing of such request for proposals.
3. The request for proposals shall provide, at a minimum, the following information: (i) the size, type, and timing of energy storage [resources projects] for which the utility anticipates contracting; (ii) any minimum thresholds that must be met by respondents [, consistent with established codes and standards] ; (iii) major assumptions to be used by the utility in the bid evaluation process, including environmental emission standards; (iv)

detailed instructions for preparing bids so that bids can be evaluated on a consistent basis;
(v) the preferred general location of additional energy storage [capacity projects] ; and
(vi) specific information concerning the factors involved in determining the price and non-price criteria used for selecting winning bids.

4. A utility may evaluate responses to the request for proposals based on any criteria that it deems reasonable but shall at a minimum consider the following in its selection process:
(i) the status of a particular project's development; (ii) the age of existing facilities; (iii) the demonstrated financial viability of a project and the developer; (iv) a developer's prior experience in the field; (v) the location and effect on the transmission grid of an energy storage [facility project] ; (vi) the benefits to the Commonwealth that are associated with particular projects, including regional economic development and the use of goods and services from Virginia businesses; (vii) the environmental impacts of particular resources, including impacts on air quality within the Commonwealth and the carbon intensity of the utility's generation portfolio; and (viii) how any project impacts the goals established by the Virginia Environmental Justice Act (§ 2.2-234 et seq. of the Code of Virginia).

5. A utility shall maintain documentation of its reasoning for rejecting any specific response [to the request for proposals].

C. [Each utility shall provide, upon request, equitable access to relevant electric system data, with appropriate confidentiality safeguards in place for privacy, system security, and public safety. Access shall be provided in a timely manner such that third parties may reasonably utilize the data to inform responses to the request for proposal.

D.] Each utility shall report on any competitive solicitations for energy storage [resources projects] as part of the annual plan required by § 56-585.5 D 4 of the Code of Virginia.

20VAC5-335-50. Behind-the-meter incentives by Phase I and Phase II Utilities.

As part of the annual proceeding required by § 56-585.5 D 4 of the Code of Virginia, each Phase I or Phase II Utility shall address behind-the-meter incentives related to energy storage. Each Phase I or Phase II Utility shall file with the commission applications for approval of behind-the-meter incentives related to energy storage. If the utility proposes to offer any such behind-the-meter incentives to customers through a demand-side management program, the utility may seek approval through any existing processes for demand-side management programs under § 56-585.1 A 5 of the Code of Virginia, rather than through a separate proceeding under this section.

20VAC5-335-60. Non-wires alternative programs by Phase I and Phase II Utilities.

As part of the annual proceeding required by § 56-585.5 D 4 of the Code of Virginia, each Phase I or Phase II Utility shall address non-wires alternative programs related to energy storage. Each Phase I or Phase II Utility shall file with the commission applications for approval of non-wires alternative programs related to energy storage. If the utility proposes to offer non-wires alternative programs to customers through a demand-side management program, the utility may seek approval through any existing processes for demand-side management programs under § 56-585.1 A 5 of the Code of Virginia, rather than through a separate proceeding under this section.

20VAC5-335-70. Peak demand reduction programs by Phase I and Phase II Utilities.

As part of the annual proceeding required by § 56-585.5 D 4 of the Code of Virginia, each Phase I or Phase II Utility shall address peak demand reduction programs related to energy storage. Each Phase I or Phase II Utility shall file with the commission applications for approval of peak demand reduction programs related to energy storage. If the utility proposes to offer any such peak demand reduction programs to customers through a demand-side management program, the utility may seek approval through any existing processes for demand-side

management programs under § 56-585.1 A 5 of the Code of Virginia, rather than through a separate proceeding under this section.

20VAC5-335-80. Permitting of non-utility energy storage facilities.

A. Other than a Phase I or Phase II Utility, each person seeking to construct and operate an energy storage facility in the Commonwealth with an energy storage power rating of [400 kilowatts one megawatt] or greater, either on a stand-alone basis or on an aggregated basis facilitated by an energy storage aggregator, shall either (i) obtain a permit from the commission pursuant to this section, or (ii) apply for and receive a certificate of public convenience and necessity from the commission pursuant to § 56-580 of the Code of Virginia for the energy storage facility, prior to commencing construction or operation. If such person applies for and receives a certificate of public convenience and necessity from the commission, a permit [under this section] shall not be required.

B. In evaluating a permit application, the commission shall make a determination for approval based upon a finding that the energy storage facility (i) will have no material adverse effect upon reliability of electric service provided by any regulated public utility; (ii) does not adversely impact any goal established by the Virginia Environmental Justice Act (§ 2.2-234 et seq. of the Code of Virginia); and (iii) is not otherwise contrary to the public interest.

C. Other than a Phase I or Phase II Utility, each person applying for a permit to construct and operate an energy storage facility with an energy storage power rating of [400 kilowatts one megawatt] or greater shall file an application with the clerk of the commission. If the applicant becomes aware of any material changes to any information while the application is pending, the applicant shall inform the commission of such changes within 10 calendar days. Applications shall include the following information:

1. Legal name of the applicant as well as any trade name.

2. A description of the applicant's authorized business structure, identifying the state authorizing such structure and the associated date (e.g., if incorporated, the state and date of incorporation; if a limited liability company, the state issuing the certificate of organization and the date of issuance).

3. Name and business addresses of all principal corporate officers and directors, partners, and LLC members, as appropriate.

4. Financial information for the applicant or principal participant in the project. If the applicant or principal participant is a private entity, financial information should include an analysis of the entity's financial condition and audited financial statements for the two most recent fiscal years. If the applicant or principal participant is a public company, financial information should include a copy or a link to where a copy can be found on the internet of the entity's most recent stockholder report and most recent Securities and Exchange Commission Form 10 K. If such information is unavailable, provide evidence that applicant has the financial resources or access to capital necessary to complete the proposed project.

5. A discussion of the applicant's qualifications, including:

a. A summary of other projects developed and managed by the applicant. Include location, status, and operational history.

b. A description of any affiliation with an incumbent electric utility as defined in § 56-576 of the Code of Virginia.

c. A disclosure of any affiliate relationship with any other permit holder.

6. Specific information about the site for the proposed facility, including:

a. A written description of the location, including identification of the city or county in which the facility will be constructed. Such description should be suitable for newspaper publication and sufficiently identify any affected areas.

b. A description of the site and a topographical map depiction of the proposed site.

c. The status of site acquisition (e.g., purchase option, ownership).

d. A description of any applicable local zoning or land use approvals required and the status of such approvals.

7. Specific information about the proposed facility, including:

a. Description of all major systems, including energy storage technology type and battery storage chemistry type, if applicable; intended uses; intended facility useful life; facility configuration; and expected suppliers of major components.

b. Energy storage power rating, energy capacity, and storage duration.

c. Estimated costs and schedule for construction, testing, and commercialization.

d. Site layouts that provide for integration of energy storage systems with adequate spacing and property setback requirements incorporated.

e. Codes and standards to which the proposed facility will be constructed.

f. Where applicable, the manner and location of the facility's interconnection to the transmission or distribution grid.

8. A general discussion of the selection process for the energy storage technology, including a description of any competitive procurement processes used.

9. A general discussion of economic development impacts of the project.

10. A list of other local, state, or federal government agencies whose requirements must be met in connection with the construction or operation of the project and a statement of the status of the approval procedures for each of these agencies.

11. An analysis of the environmental impact of the project. This analysis shall include the impacts on the environment and natural resources, analysis of alternatives considered, unavoidable adverse impacts, mitigation measures proposed to minimize unavoidable impacts, and any irreversible environmental changes. The information required by this subdivision shall be submitted to the Department of Environmental Quality, simultaneously with its filing with the commission, for coordination and review by state agencies responsible for environmental and natural resource protection. [To the extent any of the following information is not applicable to a particular project or technology, the applicant shall indicate it is not applicable.] The information shall identify:

a. Required air permits, expected restrictions, expected emissions, rates of emissions, and any needed emissions offsets or allowances.

b. Required permits for water withdrawals, expected restrictions, the amount of water estimated to be used, the source of such water, identification of a backup source of water, if any, and identification of any facilities that need to be constructed to provide such water.

c. Required permits for water discharge and potential impacts on regional water flows.

d. Required permits related to the wetlands and an identification of any tidal and nontidal wetlands located near the proposed site and how such wetlands will be impacted by applicant's proposed facility.

e. Impact of solid and hazardous wastes on local water resources.

f. Impact on natural heritage resources and on threatened and endangered species.

g. Erosion and sediment control measures.

h. Archaeological, historic, scenic, cultural, or architectural resources in the area.

i. Chesapeake Bay Preservation Areas designated by the locality.

j. Wildlife resources.

k. Agricultural and forest resources and federal, local, state, or private parks and recreation areas.

l. Use of pesticides and herbicides.

m. Geology and mineral resources, caves, and sinkholes.

n. Transportation infrastructure.

12. An analysis of the social impact of the project, including a general discussion of why the facility will not have a disproportionate adverse impact on "historically economically disadvantaged communities" as defined in § 56-576 of the Code of Virginia.

13. A general discussion of how the project will promote environmental justice in environmental justice communities and fenceline communities consistent with the Virginia Environmental Justice Act (§ 2.2-234 et seq. of the Code of Virginia).

14. A general discussion of reliability impacts, including:

a. A description of interconnection requirements and needed interconnection facilities.

Any such facilities shall be depicted on a topographic map.

b. A description of the potential impact of the proposed facility on the interconnected system. Discussion should identify and summarize any system impact studies or proposed studies.

c. A description of anticipated services that may be provided to any transmission service provider or local distribution company, including associated costs and benefits.

d. A discussion of existing and expected generation reserves in the region and the impact of the proposed facility on such reserves.

15. A discussion of safety measures the applicant will implement, including fire and explosion protection, detection and mitigation measures, and an emergency response plan, as well as a discussion of whether such measures are compliant with all applicable codes and standards.

16. A discussion of the projected useful life of the energy storage facility, including known or projected performance degradation, roundtrip efficiency, and the proposed plan for and cost of decommissioning at the end of the facility's useful life.

17. A discussion of whether the proposed facility is not contrary to the public interest. The discussion shall include an analysis of any reasonably known impacts the proposed facility may have upon reliability of service to and rates paid by customers of any regulated public utility providing electric service in the Commonwealth.

Any application that fails to conform to the requirements shall be incomplete. No action shall be taken on any application until deemed complete and filed.

Upon receipt of a complete permit application pursuant to this section, the commission shall enter an order providing notice to appropriate persons and an opportunity to comment on the application. The commission shall issue a permit for construction and operation of the energy storage facility upon finding the applicant satisfies the requirements established by [this subsection B of this] section.

D. Construction and operation of an energy storage facility in the Commonwealth with an energy storage power rating of less than [400 kilowatts one megawatt] may be undertaken without complying with the filing requirements established by this section. Persons desiring to construct and operate such facilities shall (i) submit a letter stating the location, size, and

technology of the energy storage facility to (a) the Director of the commission's Division of Public Utility Regulation and (b) the utility in whose certificated service territory the energy storage facility is located; and (ii) comply with all other requirements of federal, state, and local law.

E. In addition to the requirements of this section, each person seeking to operate an energy storage facility must complete either the interconnection process required by the commission's Regulations Governing Interconnection of Small Electrical Generators and Storage (20VAC5-314) or any federally approved [interconnection] process [~~established by the regional transmission organization~~].

F. Within 30 days of any transfer or assignment of an energy storage facility for which a permit was granted by the commission, the permit holder shall notify the commission and the utility in whose certificated service territory the energy storage facility is located of such transfer or assignment. The notice shall include (i) the date of transfer or assignment; (ii) the information required in subdivisions C 1 through C 5 of this section for the new permit holder; and (iii) a declaration by the new permit holder that it agrees to abide by all initial and continuing requirements of the permit.

G. Any person receiving a permit to operate an energy storage facility in the Commonwealth pursuant to this section shall comply with all initial and continuing requirements of the commission's permitting process. Should the commission determine, upon complaint of any interested person or the Attorney General or upon staff motion or its own motion that a permitted operator of an energy storage facility has failed to comply with any of the requirements of this section or a commission order, the commission may, after providing due notice and an opportunity for a hearing, suspend or revoke the permit or take any other actions permitted by law or regulations as it may deem necessary to protect the public interest.

20VAC5-335-90. Licensing of energy storage aggregators.

A. Other than a Phase I or Phase II Utility, each person seeking to conduct business as an energy storage aggregator shall obtain a license from the commission prior to commencing operations.

B. Each person applying for a license to conduct business as an energy storage aggregator shall file an application with the clerk of the commission. If the applicant becomes aware of any material changes to any information while the application is pending, the applicant shall inform the commission of such changes within 10 calendar days. Applications shall include the following information:

1. Legal name of the applicant as well as any trade name.
2. A description of the applicant's authorized business structure, identifying the state authorizing such structure and the associated date (e.g., if incorporated, the state and date of incorporation; if a limited liability company, the state issuing the certificate of organization and the date of issuance).
3. Name and business addresses of all principal corporate officers and directors, partners, and limited liability corporation (LLC) members, as appropriate.
4. Physical business addresses and telephone numbers of the applicant's principal office and any Virginia office location.
5. Whether the applicant is an affiliate of a Phase I or Phase II Utility. If so, the application shall further provide a description of internal controls the applicant has designed to ensure that it and its employees, contractors, and agents that are engaged in the (i) merchant, operations, transmission, or reliability functions of the electric generation systems, or (ii) customer service, sales, marketing, metering, accounting, or billing functions do not receive information from the utility or from entities that provide similar functions for or on

behalf of the utility as would give the affiliated energy storage aggregator an undue advantage over nonaffiliated energy storage aggregators.

6. A list of states in which the applicant or an affiliate conducts business as an energy storage aggregator, the names under which such business is conducted, and a description of the businesses conducted.

7. Toll-free telephone number of the applicant's customer service department.

8. Name, title, address, telephone number, and email address of the applicant's liaison with the commission.

9. Name, title, and address of the applicant's registered agent in Virginia for service of process.

10. If a foreign corporation, a copy of the applicant's authorization to conduct business in Virginia from the commission or if a domestic corporation, a copy of the certificate of incorporation from the commission.

11. Sufficient information to demonstrate, for purposes of licensure with the commission, financial fitness commensurate with the services proposed to be provided. Applicant shall submit the following information related to general financial fitness:

a. If available, applicant's audited balance sheet and income statement for the most recent fiscal year and published financial information, such as the most recent Securities and Exchange Commission forms 10-K and 10-Q. If not available, other financial information for the applicant or any other entity that provides financial resources to the applicant.

b. If available, proof of a minimum bond rating (or other senior debt) of "BBB-" or an equivalent rating by a major rating agency or a guarantee with a guarantor possessing

a credit rating of "BBB-" or higher from a major rating agency. If not available, other evidence that will demonstrate the applicant's financial responsibility.

12. The name of the utility certificated to provide service in the area in which the applicant proposes to provide service, the type of services the applicant proposes to provide, and the class of customers to which the applicant proposes to provide such services.

13. The following information related to the applicant's fitness to operate as an energy storage aggregator:

a. Disclosure of any (i) civil, criminal, or regulatory sanctions or penalties imposed or in place within the previous five years against the company, any of its affiliates, or any officer, director, partner, or member of an LLC or any of its affiliates pursuant to any state or federal law or regulation; and (ii) felony convictions within the previous five years that relate to the business of the company or to an affiliate of any officer, director, partner, or member of an LLC.

b. Disclosure of whether any application for license or authority to conduct the same type of business as it proposes to offer in Virginia has ever been denied, whether any license or authority issued to it or an affiliate has ever been suspended or revoked, and whether other sanctions have been imposed.

c. If the applicant has engaged in the provision of energy storage aggregation in Virginia or any other state, a report of all instances of violations of reliability standards that were determined to be the fault of the applicant, including unplanned outages, failure to meet service obligations, and any other deviations from reliability standards during the previous three years. The report shall include, for each instance, the following information: (i) a description of the event; (ii) its duration; (iii) its cause; (iv) the number of customers affected; (v) any reports, findings, or issuances by regulators

or electric and natural gas system reliability organizations relating to the instance; (vi) any penalties imposed; and (vii) whether and how the problem has been remedied.

14. A \$250 registration fee payable to the commission.

15. A discussion of the proposed uses of the aggregated resources, including the nature of the intended participation in wholesale electric markets, if any.

16. Sufficient information to demonstrate technical fitness commensurate with the service to be provided, to include:

a. The applicant's experience.

b. Identity of applicant's officers and key managers with direct responsibility for the business operations conducted in Virginia and their experience in the provision of storage aggregation.

c. Documentation of the applicant's membership or participation in regional reliability councils or regional transmission organizations, if any.

d. Billing service options the applicant intends to offer and a description of the applicant's billing capability, including a description of any related experience.

17. A copy of the applicant's dispute resolution procedure.

18. The standards of conduct to which the applicant adheres or agrees to adhere [tē].

An officer with appropriate authority, under penalty of perjury, shall attest that all information supplied on the application for licensure form is true and correct and that, if licensed, the applicant will abide by all applicable regulations of the commission.

C. Any application that fails to conform to the requirements of this section shall be regarded as incomplete. No action shall be taken on any application until deemed complete and filed.

D. Upon receipt of an application for a license to conduct business as an energy storage aggregator, the commission shall enter an order providing notice to appropriate persons and an opportunity for comments on the application. The commission shall issue a license to conduct business as an energy storage aggregator upon finding the applicant satisfies the requirements established by this section.

E. A license to conduct business as an energy storage aggregator granted under this section is valid until revoked or suspended by the commission after providing due notice and an opportunity for a hearing or until the energy storage aggregators abandons its license.

F. An energy storage aggregator shall comply with all initial and continuing requirements of the commission's licensure process and any reasonable registration processes required by the utility in whose certificated service territory the energy storage aggregator intends to operate. Should the commission determine, upon complaint of any interested person or the Attorney General or upon staff motion or its own motion that an energy storage [aggregators aggregator] has failed to comply with any of the requirements of this section or a commission order, the commission may, after providing due notice and an opportunity for a hearing, suspend or revoke the energy storage aggregator's license or take any other actions permitted by law or regulations as it may deem necessary to protect the public interest.

20VAC5-335-100. Energy storage aggregator registration with utility.

A. An energy storage aggregator shall submit to the utility in whose certificated service territory it intends to operate proof of licensure from the commission to provide energy storage aggregation services in the Commonwealth. An energy storage aggregator shall provide notice of any suspension or revocation of its license to the utility upon issuance of the suspension or revocation by the commission.

B. An energy storage aggregator and the utility shall exchange the names, telephone numbers, and email addresses of appropriate internal points of contact to address operational and business coordination issues and the names and addresses of their registered agents in Virginia.

20VAC5-335-110. Marketing by energy storage aggregators.

A. An energy storage aggregator shall provide accurate, understandable information in any advertisements, solicitations, marketing materials, or customer service contracts in a manner that is not misleading. Marketing material found misleading by the commission will be withdrawn [by the energy storage aggregator from its published materials] .

B. Customer service contracts shall include:

1. Explanations of the price for the energy storage aggregator's services or, if the exact price cannot feasibly be specified, an explanation of how the price will be calculated;
2. Explanations of how the customer will be compensated for the value of their energy storage;
3. Length of the service contract, including any provisions for automatic contract renewal;
4. Provisions for termination by the customer and by the energy storage aggregator;
5. A statement of any minimum contract terms, minimum or maximum storage requirements, minimum or fixed charges, and any other charges;
6. Applicable fees including start-up fees, cancellation fees, late payment fees, and fees for checks returned for insufficient funds;
7. A notice of any billing terms and conditions;
8. A toll-free telephone number and an address for inquiries and complaints;

9. In a conspicuous place, confirmation of the customer's request for enrollment and the approximate date the customer's service shall commence;

10. A notice that, upon request by the customer, the energy storage aggregator shall provide a copy of its dispute resolution procedure; and

11. A notice that, upon any change in the terms and conditions of the contract, including any provisions governing price or pricing methodology or assignment of the contract to another energy storage aggregator, the energy storage aggregator shall communicate such changes to the customer at least 30 days in advance of implementing such changes.

20VAC5-335-120. Confidentiality.

Where any application filed under this chapter, including any supporting documents or pre-filed testimony, contains information that the applicant asserts is confidential, the filing may be made under seal and accompanied by a motion for a protective order or other confidential treatment in accordance with 5VAC5-20-170.

20VAC5-335-130. Waiver.

A. Any request for a waiver of any provision in this chapter may be granted upon such terms and conditions as the commission may impose.

B. For good cause shown, any Phase I or Phase II Utility may request a waiver of the commission's Rules Governing Utility Promotional Allowances (20VAC5-313) for any proposed programs or incentives related to energy storage set forth in 20VAC5-335-50, 20VAC335-60, and 20VAC5-335-70.

C. For good cause shown, any Phase I or Phase II Utility may request a waiver of the commission's Regulations Governing the Functional Separation of Incumbent Electric Utilities under the Virginia Electric Utility Restructuring Act (20VAC5-202).